Case No.: IMEC169 . 001APC

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Devices and methods for improving the image quality in an image sensor

the specification which was filed on May 12, 1999, Serial No. 09/308,032.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

	Number	<u>Country</u>	Day/Month/Year Filed
1.	EP 978701431	European Patent Office	September 22, 1997
2.	EP 978701704	European Patent Office	October 24, 1997
3.	PCT/BE98/00139	PCT	September 22, 1998

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

IOW.			
	Application Number	Filing Date	

1. 2.

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

ius application.		
Application Number	Filing Date	Status: patented, pending, abandoned
	-	

1. 2. Application No. 09/308,032 Filed: May 12, 1999

I hereby appoint the following attorneys and agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Louis J. Knobbe, Registration No. 18,780; Don W. Martens, Registration No. 21,107; Gordon H. Olson, Registration No. 20,319; James B. Bear, Registration No. 25,221; Darrell L. Olson, Registration No. 28,247; William B. Bunker, Registration No. 29,365; William H. Nieman, Registration No. 30,201; Lowell Anderson, Registration No. 30,990; Arthur S. Rose, Registration No. 28,038; James F. Lesniak, Registration No. 25,240; Ned A. Israelsen, Registration No. 29,655; Drew S. Hamilton, Registration No. 29,801; Jerry T. Sewell, Registration No. 31,567; John B. Sganga, Jr., Registration No. 31,302; Edward A. Schlatter, Registration No. 32,297; Gerard von Hoffmann, Registration No. 33,043; Joseph R. Re, Registration No. 31,291; John M. Carson, Registration No. 34,303; Andrew H. Simpson, Registration No. 31,469; Daniel E. Altman, Registration No. 34,115; Anita M. Kirkpatrick, Registration No. 32,617; Ernest A. Beutler, Registration No. 19,901; Vito A. Canuso, Registration No. 35,471; William H. Shreve, Registration No. 35,678; Stephen \overline{C} . Jensen, Registration No. 35,556; Steven J. Nataupsky, Registration No. 37,688; Michael H. Trenholm, Registration No. 37,743; AnneMarie Kaiser, Registration No. 37,649; Brenton R. Babcock, Registration No. 39,592; Nancy Ways Vensko, Registration No. 36,298; Jonathan A. Barney, Registration No. 34,292; Ronald J. Schoenbaum, Registration No. 38,297; Richard C. Gilmore, Registration No. 37,335; John R. King, Registration No. 34,362; William S. Reimus, Registration No. 38,279; John P. Giezentanner, Registration No. 39,993; Frederick S. Berretta, Registration No. 38,004; Christopher A. Colvin, Registration No. 39,147; Richard Kim, Registration No. 40,046; Glenn R. Smith, Registration No. 38,308; Craig S. Summers, Registration No. 31,430; Robert F. Gazdzinski, Registration No. 39,990; Raimond J. Salenieks, Registration No. 37,924; R. Scott Weide, Registration No. 37,755; RenÈe E. Canuso, Registration No. 36,657; Michael L. Fuller, Registration No. 36,516; Neil S. Bartfeld, Registration No. 39,901; Daniel E. Johnson, Registration No. 37,033; Katherine W. White, Registration No. 37,470; and Richard E. Campbell, Registration No. 34,790.

Address all telephone calls to at (949) 760 0404

Address all correspondence to Knobbe, Martens, Olson & Bear, 620 Newport Center Drive, 16th floor, Newport Beach, CA 92660, USA.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor:

Bart Dierickx

Inventor's signature:

Cornelis Deherdstraat 8, 2640 Mortsel, Belgium

Residence: Citizenship:

Residence:

Belgian citizen

Full name of second inventor:

Spyros Kavadias

Inventor's signature:

Citizenship: Greek citizen

Äv. Herbert Hoover 217, 1200 Brussels, Belgium

Date:

1.3 AUG 1999

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IMEC169.001APC

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	:	Dierickx et al.
App. No.	:	09/308,032
Filed	:	May 12, 1999
For	:	DEVICES AND METHODS FOR IMPROVING) THE IMAGE QUALITY IN AN IMAGE)
Examiner	:	SENSOR)

ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION AND REVOCATION AND POWER OF ATTORNEY

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

The undersigned is empowered to act on behalf of the assignee below (the "Assignee"). A true copy of the original Assignment of the above-captioned application from the inventor(s) to the Assignee is attached hereto. This Assignment represents the entire chain of title of this invention from the Inventor(s) to the Assignee. I have reviewed this Assignment, and to the best of the Assignee's knowledge and belief, the Assignee is the owner of the entire right, title and interest in the above-referenced application.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints Louis J. Knobbe, Registration No. 18,780; Don W. Martens, Registration No. 21,107; Gordon H. Olson, Registration No. 20,319; James B. Bear, Registration No. 25,221; Darrell L. Olson, Registration No. 28,247; William B. Bunker, Registration No. 29,365; William H. Nieman, Registration No. 30,201; Lowell Anderson, Registration No. 30,990; Arthur S. Rose, Registration No. 28,038; James F. Lesniak, Registration No. 25,240; Ned A. Israelsen, Registration No. 29,655; Drew S. Hamilton, Registration No. 29,801; Jerry T. Sewell, Registration No. 31,567; John B. Sganga, Jr., Registration No. 31,302; Edward A. Schlatter, Registration No. 32,297; Gerard von Hoffmann, Registration No. 33,043; Joseph R. Re, Registration No. 31,291; John M. Carson, Registration No. 34,303; Andrew H. Simpson,

App. No. 09/308,032 May 12, 1999 Filed

Registration No. 31,469; Daniel E. Altman, Registration No. 34,115; Anita M. Kirkpatrick, Registration No. 32,617; Ernest A. Beutler, Registration No. 19,901; Vito A. Canuso, Registration No. 35,471; William H. Shreve, Registration No. 35,678; Stephen C. Jensen, Registration No. 35,556; Steven J. Nataupsky, Registration No. 37,688; Michael H. Trenholm, Registration No. 37,743; Craig S. Summers, Registration No. 31,430; AnneMarie Kaiser, Registration No. 37,649; Brenton R. Babcock, Registration No. 39,592; Nancy Ways Vensko, Registration No. 36,298; Jonathan A. Barney, Registration No. 34,292; Ronald J. Schoenbaum, Registration No. 38,297; Richard C. Gilmore, Registration No. 37,335; John R. King, Registration No. 34,362; William S. Reimus, Registration No. 38,279; Christine A. Gritzmacher, Registration No. 40,627; John P. Giezentanner, Registration No. 39,993; Adeel S. Akhtar, Registration No. 41,394; Frederick S. Berretta, Registration No. 38,004; Thomas R. Arno; Registration No. 40,490; David N. Weiss, Registration No. 41,371; James T. Hagler, Registration No. 40,631; Dan Hart, Registration No. 40,637; Lori L. Yamato, Registration No. 40,881, Moses Mares, Registration No. 40,716; Stephen M. Lobbin, Registration No. 41,159; Richard Kim, Registration No. 40,046; Robert F. Gazdzinski, Registration No. 39,990; R. Scott Weide, Registration No. 37,755; Katherine W. White, Registration No. 37,470; Richard E. Campbell, Registration No. 34,790; Raimond J. Salenieks, Registration No. 37,924; Renée E. Canuso, Registration No. 36,657; Michael L. Fuller, Registration No. 36,516; Neil S. Bartfeld, Registration No. 39,901; and Daniel E. Johnson, Registration No. 37,033; Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (714) 760-0404, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please direct all communications relative to said application to the following correspondence address:

> John M. Carson KNOBBE, MARTENS, OLSON & BEAR, LLP 620 Newport Center Drive Sixteenth Floor Newport Beach, CA 92660

Telephone: (619) 235-8550

IMEC vzw

By: Koenraad Wuxt

Title: By mandate

Address: Kapeldreef 75, B-3001 Leuven, Belgium



ASSIGNMENT

Case No.: IMEC169. 001APC

Inventor: Dierickx et al.

Date of Execution

of Application: July 2, 1999

Serial No.: <u>09/308,032</u>

Filing Date: May 12, 1999

For good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assigns to:

IMEC vzw, Kapeldreef 75, B-3001 Leuven a research center in the country of Belgium

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

Devices and methods for improving the image quality in an image sensor

and identified as:

Case No. IMEC169.001APC

in the offices of KNOBBE, MARTENS, OLSON & BEAR and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorises and requests the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorises and requests the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrants himself to be the owner of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

Application NO. 09/308,032 Filed: May 12, 1999

For said considerations the undersigned hereby agrees, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application, and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorises said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agrees, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Full name of first inventor: Bart Dierickx

Inventor's signature:

Date: 2 /7 / 1759
Cornelis Deherdstraat 8, 2640 Mortsel, Belgium

Residence:

Comens Denerustiaat 6, 2040 Mortsei, i

Citizenship:

Belgian citizen

Post Office Address:

Full name of second inventor: Spyros Kavadias

Inventor's signature:

Date: 2/=/1373

Residence:

Av. Herbert Hoover 217, 1200 Brussels, Belgium

Citizenship:

Greek citizen

Post Office Address: